

## **Report for 2003IL21B: Water Rates and Ratemaking Practices in Illinois Community Water Systems**

There are no reported publications resulting from this project.

Report Follows

## **PROBLEM AND RESEARCH OBJECTIVES**

Water rates and pricing structures embody a mix of both broad and specific allocative, environmental, and administrative objectives. Economic theory dictates that price is the most basic factor that consumers will use in their decisions on the quantity of water that they will consume. Aside from the economic efficiency criterion, there is little theoretical or practical guidance to establish the price of water services.

The primary objective of this research is to collect information on the rates and ratemaking practices of community water systems in Illinois in order to characterize rate making practices, and to organize industry experience into a rate-setting framework and corresponding model that relates pricing practices to various water utility characteristics and pricing objectives. A secondary objective is to develop a county-level water price measure that can be used to represent the influence of price in water demand models.

## **METHODOLOGY**

A mail survey questionnaire was developed and mailed to all non-state/federal, community water systems in Illinois that serve more than 100 persons ( $N=1,466$ ). The survey included a set of questions about service area characteristics and requested that participants also return copies of all rate schedules that have been in effect since 1985 at their water systems.

A second mail survey was sent to all of the water systems that responded to the first survey that had returned copies of water rate schedules, and that had included the name of the person at their system responsible for rate design ( $N=381$ ). The second questionnaire was designed to elicit information on the rate-setting process and the factors that drive the evolution of water rates.

The analysis of rate schedule information will consist of a review of rate types, water prices at various volumes and for various user categories, the history of rate increases, changes in rate structures, and the correlation of rates and rate types to relevant water system characteristics.

Mathematical scoring and statistical modeling will serve as the principal tools to design a rate assessment model that will be used to analyze the responses of the “ratemaking” component of the study. This analysis will be used to establish a theoretical construct for what can be termed as *rate acceptability*.

## **PRINCIPLE FINDINGS AND SIGNIFICANCE**

During the past year the research team has developed and implemented both mail surveys and collected a considerable volume of information water rates and ratemaking practices in Illinois. The analysis of this information is still in progress and the major findings of the study have not yet been determined.